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CLAIMS:

1. An image signal processing apparatus, comprising:

image capturing means of performing image capture using a plurality types of color filters which are arranged based on repetition of a pattern determined in advance;

color change detecting means of performing color change detection regarding the result of said image capture while considering said pattern; and

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection.

2. The image signal processing apparatus of claim 1, wherein said color change detection is performed with respect to a predetermined direction corresponding to said pattern, and

said luminance signal is generated such that a pseudo signal is suppressed at a color change point where said detected color change with respect to said predetermined direction exceeds a predetermined level.

3. The image signal processing apparatus of claim 2, wherein said pattern is a pattern having two pixels in the horizontal direction and four pixels in the vertical direction so as to arrange a color filter of magenta and a color filter

of green in this order on a first line in the horizontal direction, a color filter of yellow and a color filter of cyan in this order on a second line in the horizontal direction, a color filter of green and a color filter of magenta in this order on a third line in the horizontal direction and a color filter of yellow and a color filter of cyan in this order on a fourth line in the horizontal direction, and

said predetermined direction is the horizontal direction.

4. The image signal processing apparatus of claim 3, wherein said color change detection is performed in accordance with a change as for said magenta in the horizontal direction and a change as for said green in the horizontal direction.

5. The image signal processing apparatus of claim 4, wherein said color change detection is performed further in accordance with a change as for said yellow in the vertical direction and a change as for said cyan in the vertical direction.

6. The image signal processing apparatus of claim 4, wherein said color change detection is performed further in accordance with a change as for said magenta in the vertical direction and a change as for said green in the vertical

direction.

7. The image signal processing apparatus of claim 2, wherein said pattern is a pattern having two pixels in the horizontal direction and two pixels in the vertical direction so as to arrange a color filter of red and a color filter of green in this order on a first line in the horizontal direction and a color filter of green and a color filter of blue in this order on a second line in the horizontal direction, and

said predetermined direction is the direction of a diagonal line.

8. The image signal processing apparatus of claim 7, wherein said color change detection is performed in accordance with a change as for said red in the direction of the diagonal line and a change as for said blue in the direction of the diagonal line.

9. The image signal processing apparatus of claim 7, wherein calculation for suppression of said pseudo signal is performed in accordance with a change as for said red in the direction of the diagonal line and a change as for said blue in the direction of the diagonal line.

10. An image signal processing circuit, comprising:

color change detecting means of performing color change detection regarding the result of image capture which is performed using a plurality types of color filters which are arranged based on repetition of a pattern determined in advance, while considering said pattern; and

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection.

11. An image signal processing method, comprising:

a color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality types of color filters which are arranged based on repetition of a pattern determined in advance, while considering said pattern; and

a luminance signal generating step of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection.

12. A program which makes a computer execute the color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality types of color filters which are arranged based on repetition of a pattern determined in advance, while considering said pattern, and the luminance signal generating

step of performing luminance signal generation regarding the result of said image capture based on the result of said color change detection, which are of the image signal processing method of claim 11.

13. A recording medium which holds the program of claim 12 and which can be processed on a computer.